

Claims

1. Portable assembly for emergency ventilation,  
5 comprising:
  - a source (1) of compressed gas equipped with a  
gas pressure-reducing valve device (2) with  
which it is possible to control the flowrate  
and/or the pressure of the gas issuing from the  
10 gas source (1),
  - a respiratory assistance ventilator (3) fed  
with gas by said gas source (1), and
  - a man/machine interface (4) cooperating with  
said ventilator (3) so as to permit regulation  
15 of at least one ventilation parameter and/or of  
at least one ventilation set-point.
2. Assembly according to Claim 1, characterized in  
that the gas pressure-reducing valve device (2)  
20 comprises an outlet connector (5) to which the  
respiratory assistance ventilator (3) is fixed.
3. Assembly according to either of Claims 1 and 2,  
characterized in that the respiratory assistance  
25 ventilator (3) comprises an internal gas circuit  
(12) forming a fluidic connection from an inlet  
orifice (11) to an outlet orifice (23), a  
proportional valve (13) being arranged on said  
internal circuit (12), said valve (13) being  
30 controlled by control means (14) cooperating with  
the man/machine interface (4).
4. Assembly according to one of Claims 1 to 3,  
characterized in that the respiratory assistance  
35 ventilator (3) moreover comprises a venturi  
injector (16) arranged on the internal circuit  
(12), downstream of the proportional valve (13).

5. Assembly according to one of Claims 1 to 4,  
characterized in that the respiratory assistance  
ventilator (3) additionally comprises a flowrate  
sensor (19) and a pressure sensor (20) for  
5 measuring the flowrate and the pressure of the gas  
in the internal circuit (12), said sensors  
cooperating with the control means (14) in such a  
way as to permit automatic control and regulation  
of the proportional valve (13) in terms of  
10 flowrate and/or pressure.
6. Assembly according to one of Claims 1 to 5,  
characterized in that the man/machine interface  
(4) comprises means (33, 34, 35) for regulating a  
15 ventilation set-point or parameter in order to  
permit selection and/or regulation of at least one  
ventilation parameter and/or of at least one  
ventilation set-point, and preferably display  
means (32) cooperating with said regulating means  
20 in order to make it possible to visualize and/or  
display at least one value of at least one  
ventilation parameter and/or of at least one  
ventilation set-point that has been selected  
and/or regulated.
- 25 7. Assembly according to one of Claims 1 to 6,  
characterized in that it comprises a patient  
circuit (6) with at least one gas conduit  
connected, via its upstream end, to the outlet  
30 orifice (23) of the ventilator and, via its  
downstream end, to a respiration mask (7).
8. Assembly according to one of Claims 1 to 7,  
characterized in that the pressure-reducing valve  
35 (2) and the ventilator (3) are protected by a  
protective hood fixed on the gas source (1).
9. Assembly according to one of Claims 1 to 8,  
characterized in that the means (33, 34, 35) for

regulating a ventilation set-point or parameter permit selection and/or regulation of at least one ventilation parameter and/or of at least one ventilation set-point chosen from the group comprising the ventilation frequency, the ventilation flowrate, the ventilation volume, the composition of the gas mixture, the inhalation trigger threshold, the inhalation time and/or the exhalation time, or their ratio, the positive expiratory pressure (PEP), the ventilation mode, and the maximum safety pressure.

10. Assembly according to one of Claims 1 to 9, characterized in that the pressure-reducing valve device (2), the respiratory assistance ventilator (3) and the man/machine interface (4) cooperating with said ventilator (3) form a compact system supported by the gas source (1), in particular by an oxygen cylinder.